



High Performance T8 Systems

- a new generation of smart lighting choices

Are you wondering about the next option in quality energy-efficient lighting that will reduce energy bills and provide other benefits? The DesignLights™ Consortium wants to introduce you to High Performance T8 Systems (HPT8) -- an advanced lighting technology that you should promote as your “new” quality energy-efficient lighting standard.

For More Information On:

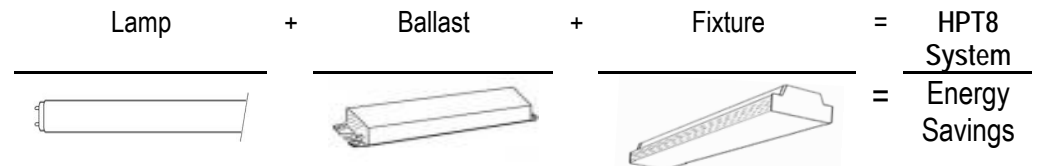
- **Qualifying HPT8 products**
- **Sponsor/Utility specific HPT8 incentives**
- **System performance**

Visit www.designlights.org

Sounds Impressive, What are the Benefits?

HPT8 fixtures provide the end-user with the latest in energy-efficient fluorescent technology. The benefits include:

- Utility bill savings for lighting: cost savings as high as 40 percent due to reduced electricity consumption
- Higher light levels maintained over the life of the lamp: based on very high (≥94%) lumen maintenance
- Reduced maintenance and lamp disposal costs: as a result of 15 percent longer life and very high lumen maintenance
- More natural color appearance: because the lamps yield better color rendering
- More light for less energy: higher lumen output and lower energy use by lamps and ballasts means higher system efficacy



What is an HPT8 System?

HPT8 Systems are light fixtures that incorporate advanced high-lumen 32 Watt T8 lamps *and* high-efficiency ballasts. These components are responsible for the value-added benefits of HPT8 Systems.

In order to qualify as an HPT8 System, the lamp installed in the fixture must have a rated life of at least 24,000 hours. This is 4,000 hours longer than a standard T8 lamp. Lamps also must have a mean output rating of at least 2,900 lumens or maintain at least 94 percent of the initial lumens over the life of the lamp. Finally, the lamp must have a color rendering index (CRI) of at least 81 – and many HPT8 lamps have a CRI higher than 85.

The installed ballast must also meet minimum requirements in order for the fixture to qualify as an HPT8 System. The ballast must meet a minimum Ballast Efficacy Factor (BEF), which varies based on the number of lamps and the type of starting technology the ballast uses. To help identify fixtures that use ballasts and lamps that meet these criteria visit

Benefits of HPT8 Lamps

- High-efficiency lamps reduce lighting energy costs.
- Extended lamp life yields fewer lamp changes and reduced maintenance and disposal costs.
- High color rendition means people, merchandise, and surroundings look better.

PLUS

Benefits of HPT8 Ballasts

- High-efficiency ballasts reduce lighting energy costs.
- Combined with HPT8 lamps they produce equivalent or more light than old T12s or even standard T8s.

EQUALS

HPT8 Systems:

Fixtures with Qualified HPT8 Lamps and HPT8 Ballasts

- Significantly reduce energy costs by as much as 40%.
- High quality light.
- Qualify for incentives in many areas.

How do I Recognize an HPT8 Fixture?



Many HPT8 fixtures look like standard fluorescent fixtures. HPT8 systems may even use the same fixture bodies as standard T8 systems. It's what is inside the fixture that makes all the difference: the type of T8 lamp and ballast incorporated into the fixture determine if it is an HPT8 system.

DesignLights™ Consortium has made available a list of qualifying fixtures at www.designlights.org. This list is routinely updated and should be used as a reference when specifying fixtures.

Are HPT8 Systems Available with Different Ballast Factor Options?

Yes. HPT8 Systems with normal and high power ballasts allow for lighting designs that use fewer fixtures or fewer lamps per fixture (of course, make sure the fixtures still provide the proper light distribution). However, most one-for-one fixture replacement applications will call for low power ballasts.

HPT8 System Savings Example (3,000sf Retail General Merchandise Area)

Annual energy cost using (35) 3-lamp fixtures and a target light level of 75 footcandles (fc) for general merchandise:

- | | |
|----------------------------------|---------|
| • F34T12 System at 60fc : | \$1,890 |
| • F32T8 Standard System at 78fc: | \$1,441 |
| • HPT8 System at 76fc : | \$1,196 |

The HPT8 System saves \$694 per year in energy costs compared to an old T12 system in the same application. (Based 3,120 annual operating hours and \$0.15per kWh)

Where do I Find HPT8 Fixtures?

Practically every fluorescent fixture manufacturer makes commodity and specification grade HPT8 fixtures. In addition, just about any type of standard T8 fixture can be upgraded by the manufacturer to be HPT8 – just include “HPT8” on the order.